Maj Waller/lm

[redacted]

WZD Official File Cy

CLASSIFICATION CHANGED TO [redacted]

By Authority of 205-2

6 APR 1966

DOWNGRADED AT 3 YEAR INTERVALS:
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

FOR DELIVERY

[redacted]

AIR LIFT WG YAHRENHEIM AFB CALIF

AF SPACE SYSTEMS DIVISION /DIELIB/ CALIF

CONTEST WG /SATELLITE/ SUNNYVALE CALIF

LOCKHEED MISSILES & SPACE COMPANY SUNNYVALE CALIF

LOCKHEED MISSILES & SPACE COMPANY YAHRENHEIM AFB CALIF /COURIER/ ZIP

DOUGLAS AIRCRAFT COMPANY YAHRENHEIM AFB CALIF /COURIER/ ZIP

INFO: LSTRATAEROSPACEFORCE

STRATAD YAHRENHEIM AFB CALIF /COURIER/ ZIP

CONTEST WG YAHRENHEIM AFB CALIF /COURIER/ ZIP

CONTEST WG PATRICK AFB FLORIDA

SECRET FROM TYCAS-8-7-6[illegible]

LOGA FOR [redacted] FOR COL MOORE [redacted]

SUNNYVALE FOR TYCAS[illegible] ZIP): DEBRIEFING/ DEBRIEF LOGA/VAFB

FOR DEBT [redacted] DEBRIEF DEB/VAFB FOR MR. BECKMAN. DEPT CLR

INTRAFACILITY

STRATAD FOR COMMAND POST AND DOSAY TERMINATE TW FOR

25

FILE 61

OFFICE SYMBOL	[redacted]			
NAME (SIGNATURE)	[redacted]			
DATE	[redacted]	LUCIEN A. PIERCY, JR., Colonel, USAF		

AFBMD Form 11
1 Nov 59

COORDINATION SHEET

Replaces AFBMD Form 11, 1 Jun 59

[redacted]

SUBJECT: VEHICLE TAKEOFF/ABORT APPLICABILITY

VEZE/SEL, [redacted] REQUIREMENTS FOR COL WEBALL. SUBJECT

CHG DOCUMENTS: SCVE PRELIMINARY LAUNCH SUMMARY/ABORT-

[redacted] REMARKS IN THE 48-HOUR SUMMARY REPORT ON

THE LAUNCH OF SPACECRAFT/LV SCVE /VEHICLE SQ/AGENA'B 5138/.

1. [redacted] OPERATIONS CLM

A. [redacted] COUNTDOWN OPERATIONS WERE STARTED AT

[redacted] JULY 1961. THE FIRST HOLD WAS SCHED AT

T-90 MINUTES FOR RELAY COUNTDOWN AND TIME TO PERMIT

[redacted] OF A TEAM TRAINED TO BE IN THE LAUNCH HAZARD

AREA [redacted] LIFTOFF TRAIL. THE DURATION OF THIS HOLD

WAS 40 MINUTES. HOLD NO. 2 WAS CALLED AT T-41 MINUTES TO

ALLOW TERMINAL CONNECTION OF A LAUNCH SAFETY INSTRUMEN-

TATION TERMINAL. THIS HOLD LASTED 9 MINUTES.

B. TERMINAL COUNTDOWN WAS STARTED AT 1525 EST. AT THE

START OF TIMER Y OF THE TERMINAL COUNT, A PLANNED HOLD

OF 2 MINUTES DURATION WAS CALLED TO ALLOW MORE THOROUGH

CHILLING OF THE [redacted] LIQUID OXYGEN SYSTEM

AND ALSO TO ALLOW THE TEMP-LOX TANK TOP PRESSURE TO

DECAY TO THE SPECIFIED LEVEL. THE TERMINAL COUNTDOWN

THEN PROGRESSED NORMALLY TO VEHICLE LIFTOFF AT 1535:00.46

EST. THE [redacted] ATTEMPTED LAUNCH WAS DISCONTINUED

[redacted]

VEZE

[redacted]

[illegible] TO VANDENBERG AFB CALIF

XXVE V[illegible]

2. [illegible] PHASE G[illegible]

A. THE GYRO DATA TRANSMITTED FROM BOTH THE THOR AND THE AGENA AND THE ENGINE POSITION DATA FROM THE THOR SHOW THAT A DIVERGENT OSCILLATION IN PITCH STARTED IMMEDIATELY AFTER LIFTOFF. INITIALLY, THE OSCILLATION FREQUENCY WAS ABOUT [illegible] CPS. AS THE AMPLITUDE OF THE OSCILLATION INCREASED, THE FREQUENCY DECREASED TO ABOUT 0.[illegible] CPS AT T + [illegible] SECONDS. THE PEAK NORMAL ACCELERATIONS INDICATED IN AGENA TRANSMITTED DATA INCREASED GRADUALLY TO APPROXIMATELY [illegible] 0.[illegible] G AT T + [illegible] SECONDS. THESE PEAK ACCELERATIONS THEN DECREASED SLOWLY TO APPROXIMATELY -0.[illegible] G AT T + [illegible] SECONDS. AFTER T + [illegible] SECONDS THE NORMAL ACCELERATIONS WERE PREDOMINATELY NEGATIVE, VARYING BETWEEN APPROXIMATELY -0.[illegible] G AND -0.[illegible] G UNTIL T + 57.[illegible] SECONDS WHEN THE MAGNITUDE INCREASED RAPIDLY TO ABOUT -[illegible] G AT T + 59.2 SECONDS. THE MAGNITUDE OF THE ACCELERATION WAS STILL INCREASING AFTER T + 59.2 SECONDS, BUT WAS BEYOND THE ACCELEROMETER CALIBRATION. THE AGENA TELEMETRY SIGNAL [illegible] ABRUPTLY AT T + [illegible] SECONDS, AND AT ABOUT THE TIME THE VTR TRI-HELIX LOST THE DOPPLER

VWZD [redacted]

[redacted]

[redacted] ARE FAILS

MAGNETIC SIGNAL. THUS THE [redacted] MAIN ENGINE CUTOFF AT T + 77.36 SECONDS. THE ENGINE CUTOFF WAS APPARENTLY CONTAINED IN THE VEHICLE ENGINE CUTOFF CIRCUIT AFTER THE CIRCUIT WAS ACTUATED BY A STRUCTURAL FAILURE.

[redacted] TELEMETERED INFORMATION WAS ALSO LOST AT THIS TIME. [redacted] PHOTOGRAPHS TAKEN FROM TRANQUILLON ISLAND SHOW TWO FLAMES /POSSIBLY GLINT/ AT THE FORWARD END OF THE DISINTEGRATING VEHICLE AT T + 78.73 SECONDS AND T + 80.14 SECONDS. AT T + 66.27 SECONDS A FIRE IS APPARENT AT THE VEHICLE FORWARD SECTION. AT T + 68.45 SECONDS THE [redacted] FLAME SECTIONS INDICATING MECO, AND BY T + 81.2 SECONDS THE VEHICLE IS ENVELOPED BY FLAME. THE [redacted] FROM AN EXPLOSION AT T + 79.36 SECONDS. THE REMAINING TELEMETERED INFORMATION WAS LOST AT ABOUT THIS SAME TIME EVEN THOUGH THE TRANSMITTER CARRIER CONTINUED. AT T + 84.1 SECONDS RANGE SAFETY TRANSMITTED A DESTRUCT SIGNAL. AT T + 125 SECONDS THE VIS VERIFORT LOST THE AGENA RADAR BEACON SIGNAL AND THE TLM-18 LOST THE ACQUISITION BEACON SIGNAL. THE TONE TELEMETRY CARRIER WAS RECEIVED BY THE TLM-18 UNTIL T + 315 SECONDS.

B. THE TELEMETERED DATA INDICATE THAT ALL OF THE

VV2D

[redacted]

[redacted]

[illegible] ANGULAR [illegible] CAUSE

GYRO OUTPUTS WERE PRESENT BUT THAT THE GYRO PITCH RATE [illegible] SIGNAL WAS NOT GETTING TO THE [illegible] MAIN ENGINE PITCH SERVO [illegible] BECAUSE OF AN OPEN OR SHORTED WIRE OR COMPONENT BETWEEN THE PITCH RATE AMPLIFIER DEMODULATOR AND THE INPUT TO THE MAIN ENGINE PITCH DIFFERENTIAL AMPLIFIER. THE PITCH RATE GYRO SIGNAL WAS APPARENTLY AFFECTING THE VERNIER ENGINE SERVOS IN A NORMAL MANNER.

C. STRUCTURAL FAILURE OF THE VEHICLE IS BELIEVED TO HAVE OCCURRED AT APPROXIMATELY T + 80 SECONDS BECAUSE OF THE HIGH NORMAL ACCELERATIONS WHICH RESULTED FROM THE PITCH OSCILLATIONS AND THE ACCOMPANYING AERODYNAMIC LOADS.

D. TRACKING DATA INDICATE THAT THE AGENA REACHED A MAXIMUM ALTITUDE OF ABOUT 34,000 FT. AND THAT IT IMPACTED ABOUT 18,000 FT. DOWNRANGE FROM THE PAD AT APPROXIMATELY T + 1[illegible] SECONDS.

3. PAD DAMAGE [illegible]

DAMAGE TO THE FACILITIES AND EQUIPMENT ON PAD 4 WAS LIGHT AND A NORMAL REHABILITATION SCHEDULE IS EXPECTED.

DEF 4.

[redacted]

[illegible]